

Valsartan induced exanthematous macular skin lesions

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ABSTRACT

Valsartan is one of the antihypertensive agents under angiotensin II receptor blocker (ARB) group that commonly used in treating hypertensive patient with underlying heart failure, chronic kidney disease and angiotensin converting enzyme inhibitor (ACE-i) drug's intolerance. We report a case of Valsartan induced exanthematous macular skin lesions. This case illustrates a rare adverse cutaneous effect of Valsartan with skin manifestation that mimicking other common skin diseases. Clinicians should consider Valsartan as one of the triggering factors for exanthematous skin manifestation.

Keywords: Valsartan, angiotensin II receptor blocker, exanthema

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INTRODUCTION

Valsartan is one of the common angiotensin II receptor blocker (ARB) that typically used in the treatment of hypertension, heart failure and chronic kidney disease (CKD). In certain circumstances, it is used as an alternate in patients who are intolerant to angiotensin converting enzyme inhibitors (ACE-i) ¹. It selectively blocks angiotensin 1 receptor and hence it prevents the action of angiotensin II, a potent vasoconstrictor¹. In the limited number of case report, there is a rare event of Valsartan-related cutaneous side effects manifestation^{2,3,4}. This case report highlighted the rare skin manifestation related to Valsartan prescribed to control hypertension.

CASE REPORT

A 45-year-old man with underlying chronic hypertension for one year and on daily Exforge® (Amlodipine 10mg and Valsartan 160mg) presented with gradual onset of generalised bilateral hyperpigmented skin lesions from both feet upwards in the past eight months. He visited many clinicians for his skin lesions and was treated as an eczema, yet the lesions were getting worse. He also was prescribed with oral antifungal but there is no improvement. The skin lesions that he had were non-itchy, spreading from feet to upwards until both knees. There was no personal or family history of atopy. There was no history of food or drug allergy.

On examination, he was well and afebrile. His blood pressure was 132/82 mmHg, and his pulse rate was 76 beats per minute. His lower limb examination showed diffuse dry scaly mild erythematous macules symmetrically involving mainly the dorsal aspect of both legs. His blood investigations indicated normal findings.

For further management, he was referred to dermatology department at general hospital. Dermatologist diagnosed his conditions as skin eruption towards Valsartan. Therefore, Valsartan was stopped, and the prescription of Amlodipine was continued. Not later after that, his skin lesion gradually improved, and the blood pressure was well controlled upon the prescription of Bisoprolol.



Figure 1. Image of exanthematous macular skin lesions of both legs.

DISCUSSION

Angiotensin II receptor blocker (ARB) is an antihypertensive agent that specially design to block angiotensin II receptors ¹. It has cardioprotective and renoprotective effects ¹. Valsartan is one of the important angiotensin II receptor blocker (ARB), indicated for the treatment of hypertension ¹.

Previous case reports described that Valsartan was associated with various medical conditions and adverse events including dizziness, headache, dry cough, acute interstitial nephritis, hypoglycemic attack, malignant melanoma and psychiatric symptoms ^{1,5-8}. However, only limited cases reported Valsartan related with cutaneous side effects ^{2,3,4}. There are a few studies reported the cutaneous side effects of other ARBs such as Olmesartan, Irbesartan and Losartan ^{4,9-12}. Clinicians should be aware of the cutaneous side effects of this commonly used agent.

CONCLUSIONS

Many antihypertensive drugs from beta blockers, calcium channel blockers, diuretics and angiotensin-converting enzyme inhibitors (ACE-I) groups have been linked to adverse cutaneous effects ¹. However, only limited cases stated that ARB specifically Valsartan related with skin manifestation side effects. Valsartan that commonly used in treating hypertensive's patient should be addressed as one of the triggering factors for exanthematous skin manifestation.

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